

IN THE CLAIMS

The text of all claims under examination is submitted, and the status of each is identified. This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (currently amended): A An isolated microorganism which is Rhodococcus rhodochrous Rhodococcus rhodochrous strain NCIMB 41164 or a mutant thereof.
2. (currently amended): A method of culturing the microorganism Rhodococcus rhodochrous Rhodococcus rhodochrous strain NCIMB 41164 or mutant thereof in a culture medium that contains urea or a derivative of urea.
3. (original): A method according to claim 2 in which urea or urea derivative is introduced into the culture medium at least six hours after the start of growth of the microorganism.
4. (previously presented): A method according to claim 2 in which the culture medium contains less than 0.2 g/l urea or the urea derivative for at least the first 6 hours of culturing the microorganism and thereafter urea or the urea derivative is added to the culture medium.
5. (previously presented): A method according to claim 2 in which the culture medium contains less than 0.2 g/l urea or the urea derivative for at least the first 12 hours of culturing the microorganism and thereafter urea or the urea derivative is added to the culture medium.
6. (previously presented): A method according to claim 2 in which urea or the urea derivative is added to the culture medium within 48 hours of culturing.
7. (currently amended): A nitrile hydratase obtainable from a microorganism which is Rhodococcus rhodochrous Rhodococcus rhodochrous strain NCIMB 41164 or a mutant thereof.
8. (currently amended): A process of preparing an amide from the corresponding nitrile wherein the nitrile is subjected to a hydration reaction in an aqueous medium in the presence of a biocatalyst selected from the group consisting of a microorganism which is a Rhodococcus rhodochrous Rhodococcus rhodochrous strain NCIMB 41164, a mutant thereof and a nitrile hydratase obtained from Rhodococcus rhodochrous Rhodococcus rhodochrous strain NCIMB 41164 or a mutant thereof.

9. (original): A process according to claim 8 in which the amide is (meth)acrylamide.

10. (original): A process according to claim 9 in which the biocatalyst is introduced into an aqueous medium and (meth)acrylonitrile is fed into the aqueous medium such that the concentration of (meth)acrylonitrile in the aqueous medium is maintained at up to 6% by weight.

11. (original): A process according to claim 10 in which the reaction continues until the concentration of acrylamide is between 30 and 55% by weight.

12. (previously presented): A process according to claim 8 in which the biocatalyst is recycled and reused.

13. (previously presented): A method of improving the biocatalytic activity of a microorganism according to claim 1, in which the microorganism is cultured in a culture medium that comprises urea or a derivative of urea , wherein urea or the derivative of urea is introduced into the culture medium at least 6 hours after the start of growth of the microorganism.

14. (original): A method according to claim 13 in which the culture medium contains less than 0.2 g/l urea or the derivative of urea for at least the first 6 hours of culturing the microorganism and thereafter urea or the derivative of urea is added to the culture medium.

15. (previously presented): A method according to claim 13 in which the culture medium contains less than 0.2 g/l urea or the derivative of urea for at least the first 12 hours of culturing the microorganism and thereafter urea or the derivative of urea is added to the culture medium.

16. (previously presented): A method according to claim 13 in which urea or the urea derivative is added to the culture medium within 48 hours of culturing.

17-18. (cancelled).

19. (previously presented): A process of preparing an amide from the corresponding nitrile wherein the nitrile is subjected to a hydration reaction in an aqueous medium in the presence of a biocatalyst

selected from the group consisting of a microorganism which is capable of producing a nitrile hydratase,
wherein the microorganism has been cultured by the method according to claim 13 .

20.(original): A process according to claim 19 in which the amide is (meth) acrylamide.

21. (original):A process according to claim 19 in which the biocatalyst is introduced into an aqueous medium and (meth)acrylonitrile is fed into the aqueous medium such that the concentration of (meth)acrylonitrile in the aqueous medium is maintained at up to 6% by weight.

22. (original): A process according to claim 21 in which the reaction continues until the concentration of acrylamide is between 30 and 55% by weight.

23. (previously presented): A process according to claim 19 in which the biocatalyst is recycled and reused.

24. (currently amended):An aqueous composition comprising a biocatalyst that is or is obtained from the microorganism ~~Rhodococcus rhodochrous~~ Rhodococcus rhodochrous strain NCIMB 41164 or a mutant thereof and wherein the biocatalyst is in the form of a non-actively growing free cell microorganism.

25. (currently amended):A method of storing the biocatalyst that is or is obtained from the microorganism ~~Rhodococcus rhodochrous~~ Rhodococcus rhodochrous strain NCIMB 41164 or a mutant thereof in the form of a non-actively growing free cell microorganism, in an aqueous storage medium.

26. (previously presented):A method according to claim 25 in which the biocatalyst is stored at a temperature above its freezing point.

27. (previously presented): A method according to claim 25 in which the biocatalyst is stored for a period of at least two days.

28. (previously presented): A composition obtained by the method according to claim 25.

29. (currently amended): A nitrile hydratase obtained from the composition according to claim 24 or obtained by the method of storing the biocatalyst that is or is obtained from the microorganism Rhodococcus rhodochrous Rhodococcus rhodochrous strain NCIMB 41164 or a mutant thereof in the form of a non-actively growing free cell microorganism, in an aqueous storage medium.

30. (currently amended): A method of producing an amide by contacting the corresponding nitrile with a nitrile hydratase, wherein the nitrile hydratase is obtained from a composition according to claim 24 or obtained by a method storing the biocatalyst that is or is obtained from the microorganism Rhodococcus rhodochrous Rhodococcus rhodochrous strain NCIMB 41164 or a mutant thereof in the form of a non-actively growing free cell microorganism, in an aqueous storage medium.

31. (original): A method according to claim 30 in which the amide is (meth)acrylamide.